

Product Evaluation

CWSF61 | 0319

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at 1-800-248-6032.

Evaluation ID: CWSF-61

Effective Date: March 1, 2019

Re-evaluation Date: February 2023

Product Name: StormWall XL Hurricane Resistant Aluminum Curtain Wall, Impact Resistant

Manufacturer: US Aluminum
Division of C.R. Laurence Co., Inc.
2503 E. Vernon Ave.
Los Angeles, CA 90058
(323) 588-1281

General Description: Frame material to be aluminum 6063-T5 and 6063-T6. Tall standard sleeves are inserted at each jamb and mullion top and bottom. Corners are coped and butted with shear blocks located at top and bottom of each jamb, at either side of each mullion at top and bottom top attach horizontal and vertical rails and mullions. Ends of sill, head and horizontals are sealed with a zone plug (XLD352). Top and bottom of each jamb are capped with a jamb cap (XLC338). Mullion ends are capped with a mullion cap (XLC325).

Doors: Doors referenced in this product evaluation report are not part of this product evaluation report. The doors used with these assemblies must be listed in a separate TDI product evaluation report.

Product Identification: A US Aluminum label will be affixed to the assembly. The label includes the manufacturer's name: (US Aluminum); the product name: (StormWall XL Hurricane Resistant Curtain Wall – Wet Glazed – LMI); the design pressure rating; dimensions are per drawing 08-0324.

Limitations:**Design Drawings:**

Curtain wall assemblies must comply with and be installed in accordance with the following design drawing:

- Drawing No. 08-03024 titled "StormWall XL Hurricane Resistant Curtain Wall – Wet Glazed – LMI;" Sheets 1 thru 25 of 25, dated December 07, 2016; signed and sealed by Luis R. Lomas, P.E on February 26, 2019. This evaluation report refers to the stated drawings as the approved drawings.

Fabrication and Assembly: US Aluminum storefront systems are fabricated in the factory. The aluminum curtain wall systems are assembled and glazed at the jobsite. The approved drawings referenced in this evaluation report indicate the options for the glazing construction.

Design pressure (DP):

The aluminum storefront systems have a maximum design pressure rating of +100/-100 psf. Refer to drawing No. 08-03024 for specific design pressure requirements.

Impact Resistance:

Products Installed in Accordance with Drawing No. 08-03024: These assemblies satisfy TDI's criteria for protection from windborne debris. These assemblies have passed an impact criteria equivalent to Missile Level D specified in ASTM E 1996-04. Install these assemblies at any height on the structure that does not exceed the design pressure rating for the assembly. These assemblies do not require an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Other Assemblies:

- The approved drawings specify the limitations on horizontal stacking and overall width.
- The approved drawings specify limitations on vertical height.
- Doors used with the assemblies must be listed in separate TDI product evaluation reports.

Installation Instructions:

General: Prepare and install the assembly in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available in the approved drawings.

Wall Framing Construction: The aluminum curtain wall system may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 2,000 psi)
- Wood: Minimum specific gravity of 0.42
- Masonry: Grout Filled Block Per ASTM C90 with $f'm = 2,000$ psi minimum.
- Metal Structure: Steel 1/4" thick minimum $FY=33$ ksi/ $FU=52$ ksi.

Fastener Requirements:

- Refer to the approved drawings for the anchor layout and notes.
- Refer to the approved drawings for the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.